



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/724,695 | 12/02/2003 | Alain Landrot | Q78616 | 1988 |

7590 10/24/2005

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

| |
|----------|
| EXAMINER |
|----------|

YEE, DEBORAH

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1742

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,695

Applicant(s)

LANDROT ET AL.

Examiner

Deborah Yee

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/443464.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-02-03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 to 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claim 1, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).
4. Claim 1 is confusing because it actively recites a step of austentizing steel blank in preamble of claim and then recites a method comprising the steps of tempering and annealing . To add clarification to claim 1, it is recommended to use the following language:

- 1) Method for producing a safety wheel for subway coach bogie running on pneumatic tires, adapted to be interposed between chassis of the bogie and corresponding pneumatic tire, said method comprising the following steps:

providing a steel wheel blank having a definitive wheel shape and comprising an outer peripheral zone comprising a braking portion, adapted to receive the action of a mechanical braking member, as well as a guiding portion projecting radially outwardly from the braking portion,

subjecting said wheel blank to heating above the austenitic transformation temperature,

selectively tempering at least said braking portion of the wheel blank without subjecting the guiding portion to this tempering,

annealing by heating the tempered braking portion such that the hardness of braking portion of said wheel blank is greater than the hardness of said guiding portion.

5. The dependent claims should be amended with similar recommended language.

6. Claim 6 recites "type" which is indefinite and needs to be omitted. Note that the addition of the word "type" to an otherwise definite expression is held to be indefinite because it is unclear what "type" was intended to convey, see MPEP 2173.05(c).

Also R2,R8 and UIC 812-3 are undefined because their compositions are not disclosed in the specification

7. Claim 4 is indefinite because it recites annealing between 850 and 900C for a duration of between 2 and 3 hours yet the preferred embodiment on page 6 of applicant's specification in lines 22 to 25 discloses annealing between 400 and 500C for a duration of between 1 and 2 hours.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 to 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent 1,794,445).

10. Similar to present invention, Davis in claim 1 discloses a method for tempering the continuous wearing surface of a car wheel by heating wheel to a critical temperature range wherein carbon is in solid solution at 1225 to 1500F as shown in figure 8 and is closely within the austenitic temperature range followed by quenching localized wearing surface area and reheating wearing surface to desired temperature for tempering and hardening and then quenching the entire casting before the main body of the casting reaches a temperature below critical temperature range. Note the prior art continuous wearing surface of a car wheel would be equivalent to the braking portion of a car wheel since braking area is where most of the wear occurs.

11. Even though prior art does not teach a final step of annealing, such would not be a patentable difference. It is well known in the metallurgical field that annealing is commonly applied to heat treated steel to relieve stress; and hence would be obvious to incorporate to the prior art process to produce no more than the known and expected effects from such a step.

Art Unit: 1742

12. Even though prior art does not teach tempering at 150 to 250C for 5 to 15 minutes as recited by claim 2, such would not be a patentable difference since it would be a matter of routine optimization and choice well within the skill of the artisan depending on the desired amount of hardenability sought

13. In regard to claim 3, prior art process in figures 1 to 7 places wheel in a horizontal position and spraying with cool liquid.

14. Prior art process teaches heating and homogenizing carbon in solid solution at 1225 to 1500F which is closely within the claimed austenitic temperature range of 850 to 900C.

15. Prior art in claim 1 teaches maintaining the whole wheel at a high critical temperature before, during and after tempering and hence would meet claim 5.

16. Davis on lines 45 to 48 in column 1 on page 1 uses a low-carbon manganese steel wheel and hence would broadly include R2,R8, or UIC 812-3 recited by claim 6 or the carbon steel recited claim 7.


17. The unapplied references have been cited to further depict the state of the art in methods of hardening wheel surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on Monday-Friday from 6:00 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deborah Yee
Primary Examiner
Art Unit 1742

dy